



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TRANSACTIONS

OF THE

AMERICAN MATHEMATICAL SOCIETY

EDITED BY

ARTHUR BYRON COBLE

LUTHER PFAHLER EISENHART

PERCEY F. SMITH

WITH THE COÖPERATION OF

GEORGE D. BIRKHOFF

EDWARD KASNER

ROBERT L. MOORE

WALLIE A. HURWITZ

WILLIAM R. LONGLEY

FOREST R. MOULTON

ERNEST J. WILCZYNSKI

DUNHAM JACKSON

CHARLES N. MOORE

FRANCIS R. SHARPE

VOLUME 21
1920

PUBLISHED BY THE SOCIETY
LANCASTER, PA., AND NEW YORK
1920

Reprinted with the permission of The American Mathematical Society

JOHNSON REPRINT CORPORATION
111 Fifth Avenue, New York 3, N. Y.

JOHNSON REPRINT COMPANY LIMITED
Berkeley Square House, London, W. 1

First Reprinting, 1963, Johnson Reprint Corporation

TABLE OF CONTENTS

VOLUME 21, 1920

PAGES

| | |
|--|-----|
| ALEXANDER, J. W., of New York, N. Y. On the equilibrium of a fluid mass at rest | 446 |
| BLISS, G. A., of Chicago, Ill. Differential equations containing arbitrary functions | 79 |
| — Functions of lines in ballistics | 93 |
| COOLIDGE, J. L., of Cambridge, Mass. The geometry of hermitian forms. | 44 |
| GLENN, O. E., of Philadelphia, Pa. A memoir upon formal invariancy with regard to binary modular transformations. Invariants of relativity | 285 |
| GREEN, G. M., of Cambridge, Mass. Nets of space curves | 207 |
| HARDY, G. H., of Oxford, England. On the representation of a number as the sum of any number of squares, and in particular of five | 255 |
| HAZLETT, O. C., of South Hadley, Mass. A theorem on modular co-variants | 247 |
| HOSKINS, L. M., of Palo Alto, Cal. The strain of a gravitating sphere of variable density and elasticity | 1 |
| JACKSON, D., of Minneapolis, Minn. On the order of magnitude of the coefficients in trigonometric interpolation | 321 |
| KLINE, J. R., of Philadelphia, Pa. Concerning approachability of simple closed and open curves | 451 |
| LE STOURGEON, E., of Lexington, Ky. Minima of functions of lines | 357 |
| MILLER, G. A., of Urbana, Ill. Properties of the subgroups of an abelian prime power group which are conjugate under its group of isomorphisms | 313 |
| MOORE, C. N., of Cincinnati, O. On the summability of the developments in Bessel's functions | 107 |
| MOORE, R. L., of Austin, Tex. Concerning simple continuous curves | 333 |
| RITT, J. F., of New York, N. Y. On the iteration of rational functions | 348 |
| SHARPE, F. R., of Ithaca, N. Y. (with V. SNYDER). Certain types of involutorial space transformations | 52 |
| SHAW, J. B., of Urbana, Ill. On triply orthogonal congruences | 391 |
| SIMONDS, E. F., of Sydney, Australia. Invariants of infinite groups in the plane | 384 |
| SNYDER, V., of Ithaca, N. Y. (with F. R. SHARPE). Certain types of involutorial space transformations | 52 |

| | |
|---|-----|
| WIENER, N., of Cambridge, Mass. A set of postulates for fields | 237 |
| WILCZYNSKI, E. J., of Chicago, Ill. One parameter families and nets of ruled surfaces and a new theory of congruences | 157 |
| —— A set of properties characteristic of a class of congruences connected with the theory of functions | 409 |